SBIR GUIDE: U.S. DEPARTMENT OF ENERGY *Updated January 2013*

This guide is for potential applicants to the U.S. Department of Energy (DOE) Small Business Innovation Research (SBIR) program. The document identifies unique aspects of the DOE SBIR program, describes the nature of its topics, and links readers to additional agency resources. When used in conjunction with MTIP's Profile of a Good Candidate, this guide will help prospective applicants determine quickly whether to pursue funding under the DoD SBIR program and how best to approach a proposal.

THE SBIR/STTR PROGRAMS

The federal Small Business Innovation Research (SBIR) program is a source of early-stage R&D seed capital for small, tech-based U.S. companies. Through 11 different participating agencies, this program offers grants or contracts to support serious R&D and commercialization of technologies of interest both to the government and to the company.

SBIR funding does not have to be matched or repaid by the small business. The award monies can be used to fund most costs associated with the R&D project and up to 7% profit. The company maintains ownership of any new intellectual property (IP), and the government retains certain rights to use the technology SBIR is a three-phase program. Phase I is to establish the technical and often commercial feasibility of the proposed technology. Phase I awards can be as high as $225,000, normally for a period of up to nine months. Phase II is to perform more in-depth R&D on the technology, ideally moving it to a prototype. Phase II awards range as high as $1.5 million for a period of up to two years.

The objective of Phase III is commercialization of the technology. This phase is non-funded though some agencies offer extra assistance in the form commercialization support programs.

In SBIR Phase I, up to 33% of the total budget may go to outside consultants/subcontractors; in Phase II, this figure rises to 50%. In addition, for both Phase I and II, the Principal Investigator (PI) must be greater than 50% employed by the company for the duration of the project.

Each of the 11 participating agencies operates its own version of the SBIR. Within any given agency, the rules and requirements frequently change from one solicitation to the next. Prospective applicants must monitor closely each targeted agency's solicitations.

Overall, agencies report that the chance of winning a Phase I award ranges from is ~7% to ~15%. Well-qualified Montana applicants can substantially improve these odds by working closely with the no-cost services offered by the Montana Technology Innovation Partnership (MTIP). If not currently enrolled for MTIP services, see the information box at the end of this Guide.

THE DOE SBIR PROGRAM

DOE's SBIR program uses grants to fund the development of technologies in such broad areas as clean energy, basic science and engineering, and nuclear security, with numerous subtopics within each. DOE typically offers three SBIR Phase I Funding Opportunity Announcements (FOAs) per year. Each FOA begins with the "Pre-Release" of the agency's areas of interest, or topics. In the "Open" period, which begins about one month after following "Pre-Release," DOE will begin accepting proposals. The due date of the final proposal typically falls another month later, after which the FOA is "Closed."

The main website for DOE's SBIR program is http://science.energy.gov/sbir/, from which potential applicants can download current and past FOAs, learn about commercialization assistance options, find past awards and stats, and more. This site also features an excellent webinar on DOE's SBIR program.

Beginning in 2013, DOE will implement some important changes to its SBIR program. For instance, maximum award sizes will range from $150,000 to $450,000, depending on the targeted. In addition, with justification, DOE may allow up to $10,000 of Phase II monies to be used for patent filing fees and related filing expenses for the

first U.S. patent relating to technology developed under the project. Also, DOE will allow applicants to secure commercialization-assistance services either through one of DOE's contracted commercialization vendors OR by the applicant budgeting up to $15,000 over three years for its own contracted commercialization-assistance services. These budgeted funds are over and above the award amount required for the project.

IDENTIFYING AN APPROPRIATE TOPIC

http://www.zyn.com/sbir/scomp.htm is a great website for tracking and accessing DOE's FOAs and topics. Unlike many agencies, DOE releases its topics in a separate document from the actual FOA. Once the topics are released, potential applicants should review them to identify any that match the applicant's technical interests and capabilities. Only if a suitable match can be found does the company have a chance to submit a proposal. A proposal must target only one topic area, and within that area, only one subtopic. DOE will not make this selection – it must be made by the applicant.

CONTACTING THE AGENCY

DOE's topics are released with little description or detail. Therefore, potential applicants who have identified a promising topic are strongly encouraged to communicate with the assigned point-of-contact (POC) to learn more about the agency's expectations relative to that topic.

A good way to approach the POC is by sending a 1-2 page write-up on the technology and scheduling a follow-up phone discussion. This write-up should begin with a clear, concise statement of the problem to be addressed and then describe (a) the company, (b) the team and its credentials, (c) the technology being proposed as a solution and an explicit statement of its innovation, (d) the market in terms of what the end product will be, who will buy it and why, an estimate of the number of potential buyers, and how the end product will reach the market, and (e) the competition. Phone communication with the POC, the applicant should know whether the technology to be proposed is a good fit to the topic.

PREPARING/SUBMITTING THE PROPOSAL

The purpose of the proposal is to provide sufficient information to persuade the review team the proposed technology is a unique and sound solution to the need expressed in the topic. The proposal should be written at a level suitable for publication – that is, with no typos, poor word usage, editorial errors, etc. There are many ways applicants can enhance their chances of success. Here are some keys:

- ***Start early.*** *Many aspects of the proposal can be planned and even drafted well before DOE ever releases its FOA. At http://science.energy.gov/sbir/funding-opportunities/, applicants can access the prior FOA, complete with detailed instructions on proposal preparation. Becoming familiar with the agency's program requirements early, which includes addressing the many necessary registrations, means the applicant can move much faster once the new topics are released.*

- ***Pre-plan the project****. Before anyone starts writing, applicants should meet with an MTIP counselor to define the objectives to be achieved in each phase of the project. MTIP's counselor will also make sure the proper proposal format is being used and will provide guidance on responding to each section of the proposal. The project should be vetted against any special considerations identified under the targeted topic area, as well as against DOE's review criteria. Careful thought should be given to any needed consultants and/or subcontractors, with the understanding that these individuals should be selected in part to strengthen the team's credentials. Contact these individuals early to discuss the project, secure their buy-in, begin to collect resumes and biographical data, and co-opt their assistance in preparing the proposal.*

- ***Read the detailed instructions thoroughly!*** *All SBIR/STTR agencies have specific requirements for font size and style, page limits, marking confidential information, and other aspects of the proposal. Agencies routinely reject proposals that don't comply with these instructions. One person on the proposal team must be responsible for reading the instructions thoroughly, highlighting all major and minor requirements, and*

initiating a proposal template. Each FOA will likely have new requirements. Also, check to see if the agency has posted an instructional webinar on its website.

- ***Allow time for an MTIP review of the draft proposal.*** *Regardless of the applicant's experience with SBIR/STTR, this outside review helps ensure the proposal is responsive to the instructions. Even the most experienced applicants have a tendency to get "off point" as they're working through the details of so many sections. The outside review helps catch this drift and ensures the discussion stays focused and "on point." Invariably, good outside reviews identify meaningful ways in which to enhance both the content and the presentation of the proposal. There is strong evidence that MTIP's involvement in the proposal-preparation process significantly improves the chance of funding.*

- ***Submit early.*** *In pre-planning the project and proposal, applicants should plan to submit their proposals at least two days prior to the final due date. Early submission avoids the possibility of server overload, which has hampered agencies in the past. It also gives applicants ample time to resolve any problems that arise during the electronic submission process.*

READY FOR THE NEXT STEP?

This agency-specific SBIR guide has been prepared by the Montana Technology Innovation Partnership (MTIP) and does not imply endorsement from the U.S. Department of Energy. A program of the Montana Department of Commerce, MTIP provides free coaching to Montana technology-based companies seeking help in applying to federal and state R&D and commercialization funding programs. For more information, contact the MTIP Program Manager at (406) 841-2749 or visit MTIP's website at www.mtip.mt.gov.